

SIMON FRASER UNIVERSITY

OFFICE OF THE VICE-PRESIDENT, ACADEMIC

MEMORANDUM

To: Senate

From: D. Gagan, Chair *David Gagan*
Senate Committee on Academic Planning

Subject: Department of Physics -
New course PHYS 863 - 3

Date: May 15, 1996

Action undertaken by the Senate Graduate Studies Committee and the Senate Committee on Academic Planning gives rise to the following motion:

Motion:

"That Senate approve and recommend approval to the Board of Governors, as set forth in S.96 - 52 , the following

New course	PHYS 863 - 3	Surface Science, Thin Films and Interfaces"
------------	--------------	--

Agreement has been reached between the Faculty and the Library in the assessment of library costs associated with the new course

Simon Fraser University
New Graduate Course Proposal Form

Department: Physics Course Number: 863-3

Course Title: Surface Science, Thin Films and Interfaces

Course Description for Calendar (*append a course outline*):

See attached.

Physics 810-3, 821-3
861-3

Credit Hours: 3 Vector: 3-0-0 Prerequisites (if any): or permission of Dept.

Estimated Enrolment: 8-10 When the course will first be offered: 96-3

Frequency of course offering: Every two years.

Justification: We have offered this course as a special topic course 3 times and have had excellent response. We would like to make it a formal course in the calendar.

Resources:

Faculty member(s) who will normally teach this course; Dr. B. Heinrich
append information about their competency to teach the course: Dr. B. Heinrich Dr. Heinrich has given the course 3 times before.

Number of additional faculty members required in order to offer this course: --

Additional space required in order to offer this course (*append details*): --

Additional specialized equipment required in order to offer this course (*append details*): --

Additional Library resources required (*append details*): annually: \$ -- one-time: \$ --

Any other resource implications of offering this course (*append details*): --

If additional resources are required to offer this course, the department proposing the course should be prepared to provide information on the source(s) of those additional resources.

Approvals:

Departmental Graduate Program Committee: [Signature]

Date: Oct 30/95

Faculty Graduate Studies Committee: [Signature]

Date: 95/11/17

Faculty: [Signature]

Date: 95/12/18

Following approval by the Faculty, this form and all relevant documentation should be forwarded to the Assistant Director - Graduate Studies in the Office of the Registrar for consideration by the Senate Graduate Studies Committee, the Senate Committee on Academic Planning and Senate.

Surface Science, Thin Films and Interfaces.

Review of surface science techniques: Auger, XPS electron spectroscopies, Low Energy Electron Diffraction (LEED), High Energy Electron Diffraction (RHEED), Scanning Tunneling Microscopy (STM). Review of thin film deposition techniques: Molecular Beam Epitaxy of metallic and semiconductor multilayer and superlattice structures. Physics and chemistry of surfaces and interfaces.